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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,485	03/12/2004	John Watt	041A.00010.U1(US)	8396
29683	7590	05/30/2006	EXAMINER	
HARRINGTON & SMITH, LLP			CARRILLO, BIBI SHARIDAN	
4 RESEARCH DRIVE			ART UNIT	
SHELTON, CT 06484-6212			PAPER NUMBER	
			1746	
DATE MAILED: 05/30/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/799,485	WATT, JOHN	
	Examiner	Art Unit	
	Sharidan Carrillo	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-6 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1,4-6, and 12-14 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 13-14 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Invention I, directed to an oil scavenge tube is unrelated to an airfoil of a gas turbine engine. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions have different modes of operation and are not disclosed as capable of use together.
2. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 13-14 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 4-6 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitations of repairing a gas turbine engine or "after operation of a gas turbine engine" constitute new matter which is not supported by the specification as originally filed. Applicant relies on page 1, lines 8-9 of the specification which recites that cleaning processes are employed in gas turbine engine overhaul processes. Applicant argues that since "overhaul" is equivalent to repair, sufficient support is provided for the claimed terminology. Applicant's arguments are unpersuasive since "overhaul" is also defined as "examined thoroughly" and therefore is not limited to the definition of repair. Additionally, applicant's entire specification is directed to a cleaning process.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 1, 4-6, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monteath (3350223) in view of Awad (US2004/0065347).

Monteath Jr. teaches cleaning cooling systems of internal combustion engines using a mobile cleaning device 10. In col. 8 and col. 9 bridging, Monteath teaches connecting the hoses of the device 10 to the engine block and radiator. Monteath teaches flowing air (col. 8, lines 68-70) followed by pumping hot alkali cleaning solution, ceasing the flow of the alkali solution, followed by purging with air, then water, ceasing the water flow and then purging with air. The hoses are then disconnected.

Monteath teaches cleaning engine parts of automobiles, but fails to teach an oil scavenge tube of a gas turbine engine. Monteath further fails to teach connecting two flexible hoses to the tube, such that fluid circulates through the hoses from the mobile flushing unit.

Awad teaches a method of flushing and cleaning engine lubrication systems. In Figs. 2-3, Awad teaches a mobile flushing unit 10 having an inlet flexible hose 206 and an outlet flexible hose 204 connected to an engine 300 for flushing cleaning fluid throughout in order to flush the lubrication system of an engine (paragraphs 2, 56, 65, and 37).

It would have been obvious to modify the method of Monteath to include two flexible hoses, as taught by Awad, for purposes of circulating cleaning fluid throughout the internal components of the engine. Monteath in view of Away fails to teach

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cleaning an oil scavenge tube. The examiner considers an oil scavenge tube to be merely a lubricating component of an engine. It would have been well within the level of the skilled artisan to modify the method of Monteath to include cleaning oil scavenge tubes since Awad teaches cleaning lubrication systems of an engine and the examiner considers an oil scavenge tube to be a lubricant component of a engine. Additionally, it would have been within the level of the skilled artisan to have modified the method of Monteath to include cleaning oil scavenge tubes since oil scavenge tubes are engine components and further since both Monteath and Awad teaches using the portable device to clean engine components.

In reference to claim 5, refer to col. 8, lines 68-70 of Monteath. In reference to claim 6, refer to col. 3, lines 58-60 of Monteath. In reference to claim 12, it would have been well within the level of the skilled artisan to disassemble any component of an engine and flush by connecting the hose of the portable cleaning system to a component and flushing cleaning solution there through. Additionally, applicant's own specification on page 2 teaches that it is conventional and well known in the art to strip the turbine rear frame, including the oil scavenge tube, off the low pressure module for cleaning.

In reference to cleaning a component of a gas turbine, it would have been within the level of the skilled artisan to apply the teachings of Monteath and Awad to cleaning gas turbines because 1) gas turbines include internal combustion engines, 2) gas turbines are analogous to internal combustion engines since they are both combustion

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engines, and 3) Awad teaches a method of cleaning engines which would include internal combustion engines as well as gas turbine engines.

Monteath in view of Awad fails to specifically recite a repairing process. However, since the claim recites repairing the engine component by cleaning and Monteath teaches cleaning, one would reasonably expect the engine components to be repaired as a result of removing contaminants since Monteath is performing the same method steps as the instantly claimed invention.

Response to Arguments

8. The rejection of the claims under 112, second paragraph, is withdrawn in view of corrections made by applicant.

9. Applicant argues that Monteath in view of Awad fails to teach the claimed features. Specifically, applicant argues that the prior art fails to teach a repair process. Applicant's arguments are unpersuasive because one would reasonably expect the engine components to be repaired as a result of removing contaminants since Monteath is performing the same method steps as the instantly claimed invention. Additionally, the claim recites a method of repairing by cleaning the component. Since Monteath is cleaning the component, one would reasonably expect the component to be repaired since cleaning results in repairing the component and the prior art of Monteath teaches the same cleaning step.

10. Applicant argues that one would not look to the teachings of Monteath because Monteath is nonanalogous art since Monteath is not directed to repairing. Applicant

further argues that the repair art is completely different from the field of cleaning.

Applicant's arguments are unpersuasive for the reasons recited in paragraph 9 above.

Additionally, applicant's own claim establishes a correlation between cleaning and repairing since the claim recites repairing a component by cleaning. One would reasonably expect the cleaning of the component to repair the engine components since contaminants are being removed. Further, applicant's entire specification is directed to cleaning and no mention and/or examples are directed to the term "repairing".

11. Applicant arguments directed to the functioning components of the gas turbine engine and automotive engine, four stroke combustion engine, and adapters are not persuasive because they are not commensurate in scope with the instantly claimed invention. Applicant's claimed invention is directed to flushing a component by connecting hoses and running cleaning liquid throughout via a mobile flushing unit. The concept of using this process to clean engine components is conventional and notoriously well known, as evidenced by the cited prior art.

12. Applicant argues that Awad does not teach circulating cleaning fluid through an entire automobile engine interior. Applicant is directed to paragraph 65 which teaches circulating the cleaning fluid throughout the engine 300.

13. Applicant argues that Awad does not teach using the hoses to flow compressed air. This limitation is cured by the primary reference.

Applicant argues that Monteath in view of Awad does not suggest two flexible hoses, each attached to an oil scavenge tube. The examiner agrees that Monteath in view of

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Away does not specifically teach cleaning an oil scavenge tube. The examiner considers an oil scavenge tube to be merely a lubricating component of an engine. It would have been well within the level of the skilled artisan to modify the method of Monteath to include cleaning oil scavenge tubes since Awad teaches cleaning lubrication systems of an engine and the examiner considers an oil scavenge tube to be a lubricant component of a engine. Additionally, it would have been within the level of the skilled artisan to have modified the method of Monteath to include cleaning oil scavenge tubes since oil scavenge tubes are engine components and further since both Monteath and Awad teaches using the portable device to clean engine components.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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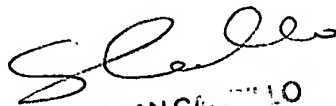
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 571-272-1297. The examiner can normally be reached on M-W 6:30-4:00pm, alternating Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sharidan Carrillo
Primary Examiner
Art Unit 1746

bsc



SHARIDAN CARRILLO
PRIMARY EXAMINER